

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 2 of 2

Complete if Known

Application Number	09/968,482
Filing Date	Sept. 28, 2001
First Named Inventor	Wang et al.
Group Art Unit	2133
Examiner Name	TBD
Attorney Docket Number	004770.00023

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	F	BOSSE, Modified Discrete Cosine Transform (MDCT), March 7, 1998, available at http://ccrma-www.stanford.edu/~bosse/proj/node27.html	
	G	FRAUNHOFER, MPEG Audio Layer-3, available at http://www.itis.fhg.de/amn/technis/layer3/index.html	File
	H	WCDMA - the wideband 'radio pipe' for 3G services, September 17, 1999, available at http://www.ericsson.com/wireless/products/gsm/subpages/umts_and_3g/wcdma.shtml	
	I	GSM Frequently Asked Questions, October 23, 2000, available at http://www.gsmworld.com/technology/faw.html	
	J	PERKINS, HODSON, Options for Repair of Streaming Media, Network Working Group RFC 2354, The Internet Society, June 1998.	Pat
	K	GOTO & HAYAMIZU, A Real-time Music Scene Description System: Detecting Melody and Bass Lines in Audio Signals, August 1999, Working Notes of the ICAI-99 Workshop on Computational Auditory Scene Analysis, p. 31-40.	Pat

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113PTO/SB/06a (08-03)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet	1	of	1
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Complete if Known

Application Number	09/966,482
Filing Date	September 28, 2001
First Named Inventor	Ye Wang, et al.
Art Unit	2655
Examiner Name	Jakieda R. Jackson
Attorney Docket Number	004770.00023

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No.¹	Document Number Number - Kind Code² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US - 5,256,832	10-26-1993	Miyake	
		US - 5,394,473	02-28-1995	Davidson	
		US - 5,361,278	11-01-1994	Vaupel, et al.	
		US - 6,064,954	05-18-2000	Cohen, et al.	
		US - 6,189,039	03-08-2001	Chen, et al.	
		US - 6,115,689	09-05-2000	Malvar	
		US - 6,453,262	09-17-2002	Hilpert, et al.	
		US - 6,477,150	11-05-2002	Maggenti et al.	
	US - 6,597,961	07-22-2003	Cooke		

NON PATENT LITERATURE DOCUMENTS

Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
	Malvar, "Biorthogonal and Nonuniform Lapped Transforms for Transform Coding with Reduced Blocking and Ringing Artifacts," IEEE Transactions on Signal Processing, Vol. 48, Issue 4, April 1998, pp 1043-1053		
Examiner Signature		Date Considered	11/23/05

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11	WASEM, O.J. et al, "The Effects of Waveform Substitution on the Quality of PCM Packet Communications," IEEE Trans. Acoustics, Speech, and Sig. Processing, vol. 36 no. 3, March 1988, pp. 342 - 348
12	SANNECK, H. et al., "A New Technique for Audio Packet Loss Concealment," IEEE Global Internet 1996, Dec. 1996 pp. 48 - 52
13	CHEN, Y.-L. Chen, B.S., "Model-based Multirate Representation of Speech Signals and its Application to Recovery of Missing Speech Packets," IEEE Trans. Speech and Audio Processing, vol. 15, no. 3, May 1997, pp. 220 - 231

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Substitute for form 1449a PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	09/968,482
		Filing Date	September 28, 2001
		First Named Inventor	Ye WANG et al.
		Group Art Unit	2655
		Examiner Name	Michael N. Opsasnick
		Attorney Docket Number	004770.00023

Sheet	1	of	1
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U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
[Signature]		US- 5,040,217	08-1991	Brandenburg et al.	
		US- 5,285,498	02-1994	Johnston	
		US- 5,481,614	01-1998	Johnston	

FOREIGN PATENT DOCUMENTS						
Examiner Initials *	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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[Signature]		Davis Pan, "A Tutorial on MPEG/Audio Compression," IEEE Multimedia, pp. 60-74, (Summer 1995).	
		A Free Audio Compression Format?, http://www.sufaco.org/mp3/free.html > .9/24/2001.	
		Yajnik, M. et al., "Packet Loss Correlation in the Mbone Multicast Network", Proc. IEEE Global Internet Conference, Nov. 1998.	
		Jayant, N.S., et al., "Effects of Packet Losses in Waveform Coded Speech and Improvements due to an Odd-Even Sample Interpolation Procedure", IEEE Trans. Commun., vol. COM-28, no. 2, Feb. 1981, pp. 101-109	
		Carle, G., et al., "Survey of Error Recovery Techniques for IP-Based Audio-Visual Multicast Applications", IEEE Network, Nov/Dec 1997.	
		Herre, J. et al., "Extending the MPEG-4AAC Codec by Perceptual Noise Substitution, 104 th AES Convention, Amsterdam 1998, preprint 4720	

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U.S. Department of Commerce
Patent and Trademark Office

Atty. Docket No.

Serial No.

004770.00023

09/966,487

Applicant:

Ye Wang et al

Filing Date:

September 28, 2001

Group:

2133

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U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	5,148,487	09/15/1992	Nagai et al			
	5,579,430	11/26/1996	Grill et al			
	5,852,805	12/22/1998	Hiratsuka et al			

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FOREIGN PATENT DOCUMENTS

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Document Number	Date	Country	Class	Subclass	Translation	
					Yes	No
0 718 982 A2	06/26/1996	EP				
98/13965	04/02/1998	WO				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

1	HERRE, et al, Evaluation of Concealment Techniques for compressed Digital Audio, Audio Engineering Society Preprint, March 16 - 19, 1993, Preprint 3460 (A1-4), Erlangen, Germany
2	BOLOT et al, Analysis of Audio Packet Loss in the Internet, Proc. Of 5 th Int. Workshop on Network and Operating System Support for Digital, Audio and Video, pp. 163-174, Durham, April 1995
3	International Standard ISO/IEC, Information Technology - Coding of Moving Pictures and Associated Audio for Digital Storage Media at up to About 1.5 Mbit/s - Part 3, Audio Technical Corrigendum 1, Published 1996-04-15
4	STENGER et al, A New Error Concealment Technique for Audio Transmission with Packet Loss, Telecommunications Institute, University of Erlangen-Nuremberg, Cauerstrasse 7, 91058 Erlangen, Germany, Eusipco 1996
5	McKINLEY et al, Experimental Evaluation of Forward Error Correction on Multicast Audio Streams in Wireless LANs, Department of Computer Science and Engineering, Michigan State University, East Lansing, Michigan 48824, pp. 1 - 10, Copyright 2000 ACM
6	NISHIHARA et al, A Practical Query-By-Humming System for a Large Music Database, NTT Laboratories, 1 - 1 Hikarinooka, Yokosuka-shi, Kanagawa, 239-0847, Japan pp. 1 - 38
7	WANG, Y., Vilemno, M., Isherwood, D. "The Impact of the Relationship Between MDCT and DFT on Audio Compression: A Step Towards Solving the Mismatch", the First IEEE Pacific-Rim Conference on Multimedia (IEEE-PCM2000), December 13 - 15, 2000, Sydney, Australia, pp. 130 - 138
8	PERKINS, C., Hodson, O., Hardman, V., "A Survey of Packet-loss Recovery Techniques for Streaming Audio," IEEE Network, Sept/Oct. 1998.
9	ETSI Rec. GSM 6.11, "Substitution and Muting of Lost Frames for Full Rate Speech Signals," 1992
10	GOODMAN, O.J. et al, "Waveform Substitution Techniques for Recovering Missing Speech Segments in Packet Voice Communications," IEEE Trans. Acoustics, Speech, and Sig. Processing, vol. ASSP-34, no. 6, Dec. 1986, pp. 1440-1448

no complete
docs

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

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Attorneys

Docket Number

Complete If Known

Application Number

09/968,482

Filing Date

September 28, 2001

First Named Inventor

Ye WANG et al.

Group Art Unit

2855


Examiner Name

Michael N. Opsasnick

Attorney Docket Number

004770.00023



U.S. PATENT DOCUMENTS

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		US- 5,040,217	08-1991	Brandenburg et al.	
		US- 5,285,498	02-1994	Johnston	
		US- 5,481,814	01-1995	Johnston	

FOREIGN PATENT DOCUMENTS

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 		Davis Par, "A Tutorial on MPEG/Audio Compression," IEEE Multimedia, pp. 60-74, (Summer 1995).	W D
		A Free Audio Compression Format?, http://www.sufooo.org/mp3/free.html , 9/24/2001. /	
		Yajnik, M. et al., "Packet Loss Correlation in the Mbone Multicast Network", Proc. IEEE Global Internet Conference, Nov. 1996.	W C
		Jayant, N.S., et al., "Effects of Packet Losses in Waveform Coded Speech and Improvements due to an Odd-Even Sample Interpolation Procedure", IEEE Trans. Commun., vol. COM-29, no. 2, Feb. 1981, pp. 101-109	W C
		Carlo, G., et al., "Survey of Error Recovery Techniques for IP-Based Audio-Visual Multicast Applications", IEEE Network, Nov/Dec 1997.	W C
		Herre, J. et al., "Extending the MPEG-4AAC Codec by Perceptual Noise Substitution, 104 th AES Convention, Amsterdam 1998, preprint 4720	W C

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by the two-letter code (WIPO Standard ST.3).⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 11 if possible.⁶ Applicant is to place a check mark here if English language Translation is attached.

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